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DISK ARRAY APPARATUS AND POWER BACKUP METHOD FOR THE SAME

ABSTRACT OF THE DISCLOSURE

HDD boxes 83₁ to 83_n are each incorporated with a secondary battery box 87, a non-isolated DC/DC converter 89, and an HDD 91. Logical circuit boards 85₁ to 85_n are each incorporated with the secondary battery box 87, fast-transient-response-type non-isolated DC/DC converters 93₁ to 93₃, and a plurality of loads 95₁ to 95₃. Every secondary battery box 87 is provided with a charge/discharge circuit 97, and a plurality of in-line secondary batteries 99. In the HDD box, the output voltage from the secondary battery box 87 goes to an HDD 91 via the DC/DC converter 89. In the logical circuit board, the output voltage from the secondary battery box 87 goes to the corresponding loads 95₁ to 95₃ via the DC/DC converters 93₁ to 93₃. With such a structure, in a disk array apparatus, realized are higher energy efficiency and less space occupation through reducing power loss and optimizing power capacity setting for a backup power.

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